

TITLE BINIOP

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 /

.GLOBL BINIOP,.DA
 / 9.3.72 JOE ATIYAH BINIOP(ST,N,DT,M)

/ IF M=0 WRITES IN IOPS BINARY N WORDS FROM ST TO DEVICE
 / ON SLOT DT IN BLOCKS OF 251 DATA WORDS,FORTAN RECORD FORMAT
 / IF M=1 READS N WORDS FROM DEVICE TO ST ONWARDS

15	000000 R 740040 A	BINIOP XX
16	000001 R 120550 E	JMS* .DA
17	000002 R 600007 R	JMP .+1+4
18	000003 R 000000 A	START 0
19	000004 R 000000 A	N 0
20	000005 R 000000 A	DAT 0
21	000006 R 000000 A	MODE 0
22	000007 R 220003 R	LAC* START
23	000100 R 723777 A	AAC -1
24	000111 R 060551 R	DAC* (11 / SET PTR TO START
25	000112 R 140544 R	DZM LFLG / SET WHEN LAST BLOCK O/P
26	000113 R 220006 R	LAC* MODE
27	000114 R 740200 A	SZA / WRITE MODE
28	000115 R 600102 R	JMP READ
29	000116 R 140547 R	DZM BLCNT
30	000117 R 200552 R	LAC (177000
31	000200 R 040144 R	DAC BUFF / SET HEADER WORD
32	000201 R 220005 R	LAC* DAT
33	000202 R 040064 R	DAC WITE
34	000203 R 040070 R	DAC WAIT1 / PLUG DAT SLOT
35	000204 R 220004 R	LAC* N / TOTAL NO OF WORDS
36	000205 R 040545 R	DAC CNT
37	000206 R 723404 A	WRLUP AAC -374 / 252 DECIMAL
38	000207 R 740100 A	SMA / LAST BLOCK
39	000300 R 600034 R	JMP NOLAST
40	000301 R 200545 R	LAC CNT
41	000302 R 440544 R	ISZ LFLG
42	000303 R 741000 A	SKP
43	000304 R 200553 R	NOLAST LAC (373 / COPY 251 WORDS
44	000305 R 740031 A	TCA
45	000306 R 040546 R	DAC COPY / -NO OF WORDS IN THIS BLOCK
46	000307 R 200554 R	LAC (BUFF+2
47	000400 R 060555 R	DAC* (10 / SET PTR FOR COPYING TO BUFF
48	000401 R 220011 A	WRCOP LAC* 11 / READ FROM DATA ARE
49	000402 R 060010 A	DAC* 10 / COPY TO BUFF
50	000403 R 440546 R	ISZ COPY / EXIT ON LAST WORD
51	000404 R 600041 R	JMP WRCOP
52	000405 R 200544 R	LAC LFLG

A

PAGE	2	BINIOP	SRC	BINIOP
53		00046	R 741200 A	SNA / LAST BLOCK
54		00047	R 600062 R	JMP SETBLK
55		00050	R 200547 R	LAC BLCNT
56		00051	R 240556 R	XOR (400000 / SET TOP BIT
57		00052	R 040547 R	DAC BLCNT
58		00053	R 200545 R	LAC CNT / NO DATA WORDS IN LAST BLOCK
59		00054	R 723003 A	AAC 3 / TOTAL NO WRDS INC. HEADER
60		00055	R 740031 A	TCA
61		00056	R 500557 R	AND (-2
62		00057	R 740031 A	TCA / ROUND UP TO EVEN NUMBER
63		00060	R 660710 A	ALSS 10 / W.P.C. IN TOP 9 BITS
64		00061	R 040144 R	DAC BUFF / SET HEADER
65		00062	R 200547 R	SETBLK LAC BLCNT
66		00063	R 040146 R	DAC BUFF+2 / SET RECORD BLOCK COUNT
67		00064	R	WITE .WRITE 0.0,BUFF,10 / IOPS BINARY,DAT SLOT PLUGGED
		00064	R 000000 A *G	CAL+0*1000 0&777
		00065	R 000011 A *G	11
		00066	R 000144 R *G	BUFF
			*G	.DEC
		00067	R 777766 A *G	-10
68		00070	R	WAIT1 .WAIT 0 / SLOT PLUGGED
		00070	R 000000 A *G	CAL 0&777
		00071	R 000012 A *G	12
69		00072	R 200544 R	LAC LFLG
70		00073	R 740200 A	SZA
71		00074	R 620000 R	JMP* BINIOP / LAST BLOCK DONE
72		00075	R 440547 R	ISZ BLCNT / UPDATE BLOCK COUNT
73		00076	R 200545 R	LAC CNT
74		00077	R 723405 A	AAC -373
75		00100	R 040545 R	DAC CNT / UPDATE NO OF WORDS LEFT
76		00101	R 600026 R	JMP WRLUP
77		00102	R 140545 R	READ DZM CNT / NO OF WORDS READ
78		00103	R 220005 R	LAC* DAT
79		00104	R 040106 R	DAC REED
80		00105	R 040112 R	DAC WAIT2
81		00106	R	REED .READ 0.0,BUFF,254 / IOPS BINARY,DAT SLOT PLUGGED
		00106	R 000000 A *G	CAL+0*1000 0&777
		00107	R 000010 A *G	10
		00110	R 000144 R *G	BUFF
			*G	.DEC
		00111	R 777402 A *G	-254
82		00112	R	WAIT2 .WAIT 0 / SLOT PLUGGED
		00112	R 000000 A *G	CAL 0&777
		00113	R 000012 A *G	12
83		00114	R 200144 R	LAC BUFF
84		00115	R 660510 A	LRSS 10 / EVEN WORD COUNT
85		00116	R 723775 A	AAC -3 / SUBTRACT HEADER WORDS
86		00117	R 740031 A	TCA
87		00120	R 040546 R	DAC COPY / -NO OF DATA WORDS (-1?)
88		00121	R 740031 A	TCA
89		00122	R 340545 R	TAD CNT
90		00123	R 040545 R	DAC CNT / UPDATE WORDS READ

PAGE	3	BINIOF	SRC	BINIOF
91		00124	R 740031 A	
92		00125	R 360004 R	TAD* N / COUNT EXCEEDS TOTAL NO OF WRDS?
93		00126	R 741100 A	SPA / NO . COPY CORRECT, SINCE ALL BUT LAST BLOCK
94				/ HAVE 254 WORDS(EVEN)
95		00127	R 440546 R	ISZ COPY / CORRECT LAST BLOCK WRD COUNT
96		00130	R 200554 R	LAC (BUFF+2
97		00131	R 060555 R	DAC* (10 / SET PTR FOR COPYING FROM BUFF
98		00132	R 220010 A	RDCOP LAC* 10 / READ FROM BUFF
99		00133	R 060011 A	DAC* 11 / COPY TO DATA AREA
100		00134	R 440546 R	ISZ COPY
101		00135	R 600132 R	JMP RDCOP
102		00136	R 220004 R	LAC* N
103		00137	R 740031 A	TCA
104		00140	R 340545 R	TAD CNT
105		00141	R 740100 A	SMA / MORE WORDS LEFT
106		00142	R 620000 R	JMP* BINIOF
107		00143	R 600106 R	JMP REED
108				/ SYMBOL TABLE
109		00144	R A	BUFF .BLOCK 400
110		00544	R 000000 A	LFLG 0 / LAST BLOCK INDICATOR
111		00545	R 000000 A	CNT 0 / TOTAL WORD COUNT
112		00546	R 000000 A	COPY 0 / BLOCK WORD COUNT
113		00547	R 000000 A	BLCNT 0 / BLOCK COUNT
114			000000 A	.END
		00550	R 000550 E *E	
		00551	R 000011 A *L	
		00552	R 177000 A *L	
		00553	R 000373 A *L	
		00554	R 000146 R *L	
		00555	R 000010 A *L	
		00556	R 400000 A *L	
		00557	R 777776 A *L	
			SIZE=00561	NO ERROR LINES

PAGE 4 BINIOP CROSS REFERENCE

BINIOP	00000	1	10	15*	71	106			
BLCNT	00547	29	55	57	65	72	113*		
BUFF	00144	31	46	64	66	67	81	83	96
		109*							
CNT	00545	36	40	58	73	75	77	89	90
		104	111*						
COPY	00546	45	50	87	95	100	112*		
DAT	00005	20*	32	78					
LFLG	00544	25	41	52	69	110*			
MODE	00006	21*	26						
N	00004	19*	35	92	102				
NOLAST	00034	39	43*						
RDCOP	00132	98*	101						
READ	00102	28	77*						
REED	00106	79	81*	107					
SETBLK	00062	54	65*						
START	00003	18*	22						
WAIT1	00070	34	68*						
WAIT2	00112	80	82*						
WITE	00064	33	67*						
WRCOP	00041	48*	51						
WRLUP	00026	37*	76						
.DA	00550	10	16						